



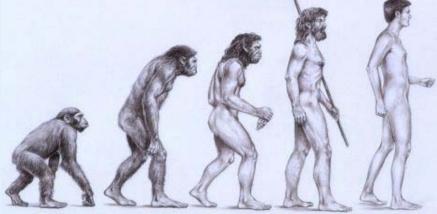




#### COUPP-4 kg Running Again at SNOLAB

Michael B. Crisler Fermi National Accelerator Laboratory 04 June, 2012

# COUPP Bubble Chamber Program





Test tube



COUPP 2kg



COUPP 4kg



COUPP 60kg <sup>2</sup>

#### New Run of Upgraded COUPP-4kg

- New Low-Background Piezos
- Synthetic Silica Viewport Window
  - To address neutron backgrounds
- Improved CF3I Purity
  - To address possible impurity related backgrounds.

#### The Plan...

- Drive Chamber to Canada May 20
- Stage Above Ground May 21
- Deliver Underground May 22
- · Install in Pressure Vessel May 23
- Fill with CF<sub>3</sub>I May 24
- Warm Up and Run May 25

# Staged Underground Tuesday May 22



# Installed Wednesday May 23



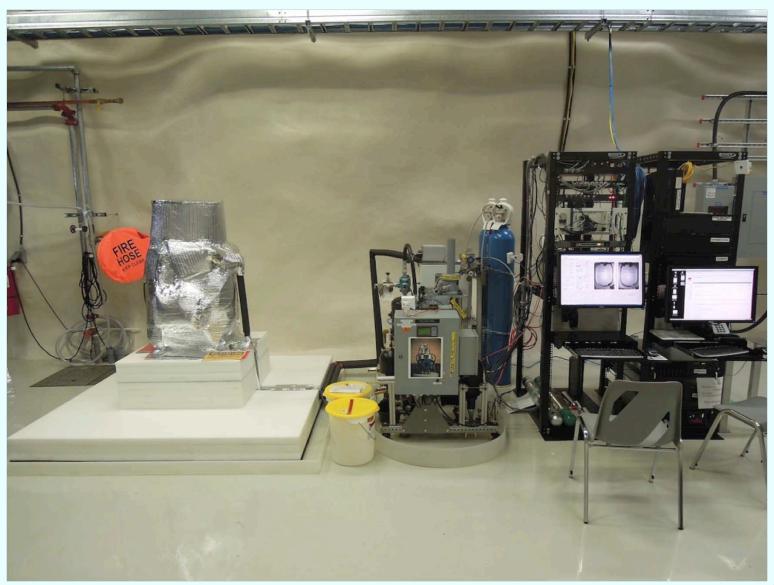
# Filled Thursday May 24



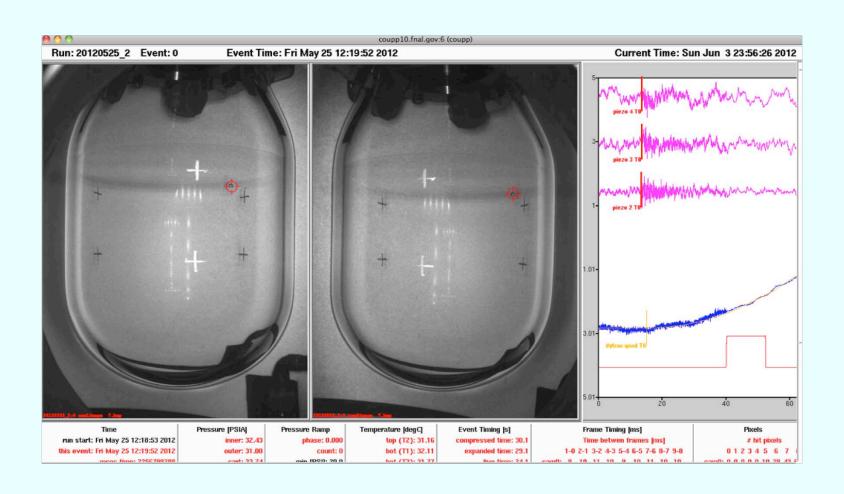
# Filled Thursday May 24



### Warmed Up and Operated Friday May 25



### Neutron Source Event Friday May 25



#### New Run of Upgraded COUPP-4kg

#### Summary

- Expect 15 keV Threshold operations through August-September 2012
- Followed by Lower Threshold 10-7 keV
- Alternate Fluid Studies  $C_4F_{10}$ ,  $C_3F_8$
- COUPP-60 Installation Fall 2012
- Thanks to PPD-MD
  - Especially PAB, Mark Ruschman
- Thanks to AD (AO Cleaning Facilities)
- Thanks to CD (Data handling & support)